| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/722,734 | 11/25/2003 | Makoto Yokoi | | 7309 |

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| EXAMINER |
|---|
| LE, TUAN H |

| ART UNIT | PAPER NUMBER |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) |
|---|---|---|
| **Office Action Summary** | 10/722,734 | YOKOI, MAKOTO |
| | Examiner | Art Unit | |
| | Tuan H. Le | 2622 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1) ☒ Responsive to communication(s) filed on *19 March 2007*.
2a) ☐ This action is **FINAL**.  2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4) ☒ Claim(s) *1-39* is/are pending in the application.
    4a) Of the above claim(s) *4-14,16,20 and 36-39* is/are withdrawn from consideration.
5) ☐ Claim(s) ~~is/are~~ is/are allowed.
6) ☒ Claim(s) *1-3, 15, 17, 21-35* is/are rejected.
7) ☒ Claim(s) *18 and 19* is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

## Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on *25 November 2003* is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☒ All   b) ☐ Some *  c) ☐ None of:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____.
      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

This office action is in response to the elected species filed on March 19,

2007, in which the applicant elected species III (Fig. 7-9) and claims 1-3, 15, 17-

19, 21-35.

### *Priority*

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d),

which papers have been placed of record in the file.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1-3, 15, 17, and 32 are rejected under 35 U.S.C. 102(e) as**

**being anticipated by Loui (U.S. Pat. 6,937,273).**

Regarding **claims 1 and 32**, Loui discloses an image pickup device

comprising:

an imaging section (50) that executes a moving picture pickup processing

and a still picture pickup processing (see Loui, Fig. 3, wherein CCD image

sensor is used);

a voice recording section (56) that executes a voice recording processing
in parallel with the moving picture pickup processing (see Loui, Fig. 3, wherein a
microphone is used); and

an interrupt processing section (68) that sequentially executes, during the
moving picture pickup processing by the imaging section, a processing to
suspend the moving picture pickup processing by the imaging section, a
processing to pickup a still picture by the imaging section, and a processing to
resume the moving picture pickup processing by the imaging section (see Loui,
Fig. 3 column 1 lines 58-60 and column 4 lines 33-35, wherein CPU assumes
overall control of camera, thus suspends motion image capture, captures still
image, and resumes motion image capture),

wherein the interrupt processing section (68) continually executes the
voice recording processing executed by the voice recording section in parallel
with the moving picture pickup processing before the moving picture pickup
processing is suspended, until the moving picture pickup processing is resumed
(see Loui, column 1 lines 53-58, wherein audio data accompanying a scene is
capture during video mode).

As for **claim 2**, Loui discloses a moving picture file creation section (68)
that creates a single moving picture file that includes moving picture frames
obtained through the moving picture pickup processing executed before the still
picture pickup processing by the imaging section, and moving picture frames
obtained through the moving picture pickup processing resumed after the still
picture pickup processing (see Loui, Fig. 3 column 1 lines 53-60 and column 4

lines 33-35, wherein camera mode is switched and motion image is compressed

and stored as an object in an object oriented image processing system).

As for **claim 3**, Loui discloses a recording section (24) that stores the

single moving picture file created by the moving picture file creation section (68),

correlated with voice data obtained through the voice recording processing

executed by the voice recording section (56), (see Loui, Fig. 1, column 1 lines

53-60, wherein motion image and audio is stored).

As for **claim 15**, Loui discloses a resumption instruction section (68) that

instructs to resume the moving picture pickup processing by the imaging section,

wherein the interrupt processing section executes a processing to resume the

moving picture pickup processing by the imaging section, when the resumption

instruction section instructs to resume the moving picture pickup processing by

the imaging section after the still picture pickup processing is completed (see

Loui, Fig. 3, column 1 lines 58-60 and column 4 lines 33-35, wherein CPU 68

periodically switches between video mode and still mode, thus resuming moving

picture pickup processing).

As for **claim 17,** Loui discloses a recording section (24) that records the

single moving picture file created by the moving picture file creation section (see

Loui, Fig. 3, column 1 lines 53-60, wherein motion image is stored).

## *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

**Claims 21, 29, and 33 are rejected under 35 U.S.C. 103(a) as being**

**unpatentable over Loui (U.S. Pat. 6,937,273) and further in view of Saito**

**(U.S. Pub. 2003/0095191).**

As for **claim 21,** Loui discloses all of the limitations of the parent claim.

However, Loui does not disclose a synchronization section.

On the other hand, Saito discloses a synchronizing control section (20)

that synchronizes a start timing to resume the moving picture pickup processing

by the imaging section with a moving picture frame pickup cycle of the moving

picture pickup processing conducted before the moving picture pickup

processing is suspended (see Saito, Fig. 2, paragraphs [0017] and [0018],

wherein motion image insertion time period is synchronized immediately after still

image pickup).

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to combine the synchronizing control section as

described by Saito with the image pickup device as described by Loui to

synchronize motion image capture after a still image is taken because such

combination results in shortened movie image insertion time period and smooth

moving image, (see Saito, paragraph [0018]).

Regarding **claims 29 and 33**, Loui discloses

an imaging section (50) that executes a moving picture pickup processing

and a still picture pickup processing, (see Loui, Fig. 3, wherein CCD image is

used);

an interrupt processing section (68) that sequentially executes, during the

moving picture pickup processing by the imaging section, a processing to

suspend the moving picture pickup processing by the imaging section, a

processing to pickup a still picture by the imaging section, and a processing to

resume the moving picture pickup processing by the imaging section (see Loui,

Fig. 3, column 1 lines 58-60 and column 4 lines 33-35, wherein CPU assumes

overall control of camera, thus suspends motion image capture, captures still

image, and resumes motion image capture);

However, Loui does not disclose a synchronization section.

On the other hand, Saito discloses a synchronizing control section (20)

that synchronizes a start timing to resume the moving picture pickup processing

by the imaging section with a moving picture frame pickup cycle of the moving

picture pickup processing conducted before the moving picture pickup

processing is suspended (see Saito, Fig. 2, paragraphs [0017] and [0018],

wherein motion image insertion time period is synchronized immediately after still

image pickup).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the synchronizing control section as described by Saito with the image pickup device as described by Loui to synchronize motion image capture after a still image is taken because such combination results in shortened movie image insertion time period and smooth moving image, (see Saito, paragraph [0018]).

**Claims 22-28 and 30-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loui (U.S. Pat. 6,937,273) and further in view of Monti (U.S. Pat. 6,680,748).**

As for **claim 22**, Loui discloses all of the limitations of the parent claim. However, Loui does not disclose a timer section that measures elapsed time.

On the other hand, Monti discloses a timer section (258) that measures the time elapsed since the processing to suspend the moving picture pickup processing is executed by the interrupt processing section, a judging section (258) that judges as to whether or not the time measured by the timer section has reached a predetermined time before the processing to resume the moving picture pickup processing by the interrupt processing section is executed, and a predetermined processing execution section (258) that executes a predetermined processing when the judging section determines that the predetermined time has been reached (see Monti, Figs. 2A, 2E, 2D, wherein step 208 determines if time has elapsed and decides to resume video capture or to capture still image).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the timer section, judging section,

and predetermined processing execution section as described by Monti with the image pickup device as described by Loui in order to switch between motion image mode and still image mode because such combination minimizes storage capacity and thus reduces camera cost.

As for **claim 23**, Loui and Monti disclose all of the limitations of the parent claim. In addition, Monti discloses an image pickup instruction section (258) that instructs to pickup a still picture, wherein the predetermined processing execution section executes a notice processing to urge an instruction to pickup a still picture by the image pickup instruction section (see Monti, Figs. 2A and 2E wherein still image is captured in step 210).

As for **claim 24**, Loui and Monti disclose all of the limitations of the parent claim.. In addition, Monti discloses that the predetermined processing execution section (258) causes the interrupt processing section to forcefully execute the processing to resume the moving picture pickup processing by the interrupt processing section, (see Monti, Figs. 2A and 2E, wherein video image is captured in step 204).

As for **claim 25**, Loui discloses all of the limitations of the parent claim. However, Loui does not disclose multiple executions of still images by the interrupt processing section.

On the other hand, Monti discloses executing still picture pickup processing a plurality of times during a period starting when the processing to suspend the moving picture pickup processing is executed until the processing to resume the moving picture pickup processing is executed (see Monti, column 7

lines 33-39, wherein multiple still images are captured and stored during interlace interval).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the executing still image pickup processing a plurality of times as described by Monti with the image pickup device as described by Loui in order to obtain multiple still images because such combination provides more information about a scene captured by the still images.

As for **claim 26**, Loui and Monti discloses all the limitations of the parent claim. In addition, Monti discloses the limitation of the maximum execution number of the still picture pickup processing that is executed during a period starting when the processing to suspend the moving picture pickup processing is executed until the processing to resume the moving picture pickup processing is executed (see Monti, column 5 lines 66-67 and column 6 lines 1-3, wherein programmable interlace interval is the frequency for still image capturing, thus the frequency is the upper limit for still image capture).

As for **claim 27**, Loui and Monti discloses all the limitations of the parent claim. In addition, Monti discloses forcefully executing the processing to resume the moving picture pickup processing, when the number of execution of the still picture pickup processing has reached the maximum execution number (see Monti, Fig. 2A, wherein the NO path is chosen in step 208).

As for **claim 28**, Loui and Monti discloses all the limitations of the parent claim. In addition, Monti discloses an image pickup instruction section (258) that

instructs to pickup a still picture, wherein, when the image pickup instruction

section repeatedly instructs to pickup still pictures, the interrupt processing

section repeatedly executes the still picture pickup processing during a period

starting when the processing to suspend the moving picture pickup processing is

executed until the processing to resume the moving picture pickup processing is

executed (see Monti, Fig. 2A and column 7 lines 34-37, wherein multiple still

images are taken during motion picture suspension).

Regarding **claims 30 and 34**, Loui discloses

an imaging section (50) that executes a  moving picture pickup processing

and a still picture pickup processing, (see Loui, Fig. 3, wherein CCD image is

used);

an interrupt processing section (68) that sequentially executes, during the

moving picture pickup processing by the imaging section, a processing to

suspend the moving picture pickup processing by the imaging section, a

processing to pickup a still picture by the imaging section, and a processing to

resume the moving picture pickup processing by the imaging section (see Loui,

Fig. 3, column 1 lines 58-60 and column 4 lines 33-35, wherein CPU assumes

overall control of camera, thus suspends motion image capture, captures still

image, and resumes motion image capture);

However, Loui does not disclose a timer section that measures elapsed

time, a judging section that determines whether elapsed time has reached, and a

predetermined processing execution section that executes a predetermined

processing.

On the other hand, Monti discloses

a timer section (258) that measures the time elapsed since the processing

to suspend the moving picture pickup processing is executed by the interrupt

processing section,

a judging section (258) that judges as to whether or not the time measured

by the timer section has reached a predetermined time before the processing to

resume the moving picture pickup processing by the interrupt processing section

is executed, and

a predetermined processing execution section (258) that executes a

predetermined processing when the judging section determines that the

predetermined time has been reached (see Monti, Figs. 2A, 2E, 2D, wherein step

208 determines if time has elapsed and decides to resume video capture or to

capture still image).

Therefore, it would have been obvious to one of ordinary skill in the art at

the time the invention was made to combine the timer section, judging section,

and predetermined processing execution section as described by Monti with the

image pickup device as described by Loui in order to switch between motion

image mode and still image mode because such combination minimizes storage

capacity and thus reduces camera cost.

Regarding **claims 31 and 35,** Loui discloses

an imaging section (50) that executes a  moving picture pickup processing

and a still picture pickup processing, (see Loui, Fig. 3, wherein CCD image is

used);

an interrupt processing section (68) that sequentially executes, during the moving picture pickup processing by the imaging section, a processing to suspend the moving picture pickup processing by the imaging section, a processing to pickup a still picture by the imaging section, and a processing to resume the moving picture pickup processing by the imaging section (see Loui, Fig. 3, column 1 lines 58-60 and column 4 lines 33-35, wherein CPU assumes overall control of camera, thus suspends motion image capture, captures still image, and resumes motion image capture);

However, Loui does not disclose multiple executions of still images by the interrupt processing section.

On the other hand, Monti discloses executing still picture pickup processing a plurality of times between the time the processing to suspend the moving picture pickup processing is executed and the time the processing to resume the moving picture pickup processing is executed (see Monti, column 7 lines 33-39, wherein multiple still images are captured and stored during interlace interval).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the executing still image pickup processing a plurality of times as described by Monti with the image pickup device as described by Loui in order to obtain multiple still images because such combination provides more information about a scene captured by the still images.

### *Allowable Subject Matter*

**Claims 18 and 19** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. More specifically, the prior art of record neither anticipates nor renders obvious the "substitute frames substituting for moving picture frames missing due to suspension of the moving picture pickup processing" by "using moving picture frames obtained through the moving picture pickup processing executed immediately before the moving picture pickup processing is suspended" and included in a moving picture file.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. 6,359,649, wherein video camera is integrated with still camera.

U.S. Pat. 6,961,083, wherein concurrent dual pipeline for acquisition, processing and transmission of digital video and high resolution digital still photographs.

U.S. Pat. 4,714,963, wherein asynchronous still timing for a video camera producing movie or still images.

U.S. Pat. 6,424,795, wherein an apparatus and a method for recording moving and still pictures are disclosed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Le whose telephone number is (571) 270-1130. The examiner can normally be reached on M-Th 7:30-5:00 F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tuan Le
May 29, 2007.

DAVID OMETZ
SUPERVISORY PATENT EXAMINER